Annotated Checklist Of The Millipeds Of California (Arthropoda: Diplopoda)

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Nearly 40 years have elapsed since Buckett (1964) published a listing of California Diplopoda. This work preceded 2 periods of activity on the state’s fauna, the first from 1964 through 1975 by Buckett and M.R. Gardner, and the second from 1989 through 1997 by myself. Knowledge of California diplopods is thus significantly advanced over the condition in 1964, to the point that a new checklist is in order. Buckett (1964) documented a fauna of 9 orders, 23 families, 80 genera, and 178 species and subspecies, 126 of which (70.1% of the total) were known only from the type locality; the present contribution documents a fauna of 11 orders, 24 families, 83 genera, and 226 species and subspecies, 78 of which (34.5% of the total) are known only from the type locality. While considerable work has been done on the California fauna, much remains, and this contribution is intended to stimulate future research.

With the publication of this checklist, California becomes the 4th state with a modern milliped listing, the others being Michigan (Snider 1991, an update of an old list by Johnson [1954]), North Carolina (Shelley 2000a), and Florida (Shelley 2001). An earlier publication on Ohio (Williams and Hefner 1928) is now obsolete. In addition, the faunas of eastern and western Canada have been documented (Shelley 1988, 1990), and there are now 2 continental checklists, by Chamberlin and Hoffman (1958) and Hoffman (1999), from which faunal information can be gleaned for California or any other state in the continental United States. Four diplopods—Cylindroiulus caeruleocinctus (Wood), C. truncorum (Silvestri), Ophyiulus pilosus (Newport), and Opiona fisheri Gardner and Shelley (Chordeumatida: Caseyidae) are newly recorded from California. The new combination Atopetholus wheeleri (Chamberlin) is proposed.

Key words: milliped, California.

ABSTRACT.—The milliped fauna of California consists of 11 orders, 24 families, 83 genera, and 226 species and subspecies. A complete listing of these taxa and intergrades is provided, with published and new records from the state and type localities. Cylindroiulus caeruleocinctus (Wood), C. truncorum (Silvestri), Ophyiulus pilosus (Newport), and Opiona fisheri Gardner and Shelley (Chordeumatida: Caseyidae) are newly recorded from California. The new combination Atopetholus wheeleri (Chamberlin) is proposed.
records; counties alone are presented when there are more than 6 new counties. Details about junior synonyms should be sought in either Hoffman (1999) or the reference given for the relevant taxa. Acronyms of sources of preserved material are as follows:

AMNH – American Museum of Natural History, New York, NY
BYU – Monte L. Bean Life Science Museum, Provo, UT
CAS – California Academy of Sciences, San Francisco
CDFA – California Department of Food and Agriculture, Sacramento
FMNH – Field Museum of Natural History, Chicago, IL
FSCA – Florida State Collection of Arthropods, Gainesville
LACMNH – Los Angeles County Museum of Natural History, Los Angeles, CA
MCZ – Museum of Comparative Zoology, Harvard University, Cambridge, MA
NCSM – North Carolina State Museum of Natural Sciences, Raleigh
NMNH – National Museum of Natural History, Smithsonian Institution, Washington, DC
TMM – Texas Memorial Museum, Austin
UAZ – Department of Entomology, University of Arizona, Tucson
UCB – Entomology Department, University of California, Berkeley
UCD – Entomology Department, University of California, Davis
UCR – Entomology Department, University of California, Riverside
UID – Entomology Department, University of Idaho, Moscow
WAS – Private collection of W.A. Shear, Hampden-Sydney, VA
WSU – Entomology Department, Washington State University, Pullman
WTAMU – Department of Life, Earth, and Environmental Sciences, West Texas A&M University, Canyon, TX

Subclass Penicillata
Order Polychelida
Family Polychelidae
Genus Polychelus Latreille

Polychelus anacapensis Pierce, 1940

TYPE LOCALITY.—Middle Anacapa Island, Santa Barbara County.


REFERENCE.—Pierce 1940.

REMARKS.—For convenience I list all samples of California Polychelus that I have seen under P. anacapensis. Some may refer to other species.

Subclass Chilognatha
Infraclass Pentazonia
Order Glomerida
Family Glomeridae

Genus Glomeroides Chamberlin, 1922

Glomeroides primus (Silvestri, 1929)

TYPE LOCALITY.—Mill Valley, Marin County.

OCCURRENCE IN CALIFORNIA.—Published records: Marin and Monterey counties. New records: Contra Costa Co., Redwood Park (FSCA, NMNH) and Morega Redwoods (CAS). Santa Cruz Co., Ben Lomond (FSCA) and Santa Cruz City Cave (FSCA).

REFERENCE.—Shear 1986.

Subterclass Colobognatha
Order Polyzoniida
Family Polyzoniidae
Subfamily Buzoniinae
Tribe Buzoniini
Genus Buzonium Cook and Loomis, 1928

Buzonium crassipes Cook and Loomis, 1928

TYPE LOCALITY.—Sunppside Mine near Seneca, Plumas County.

OCCURRENCE IN CALIFORNIA.—Published records: Calaveras, Del Norte, El Dorado, Humboldt, Mendocino, Nevada, Placer, Siskiyou, Sonoma, and Trinity counties. New records: None.

REFERENCE.—Shelley 1997a.

Tribe Bdellozoniini
Genus Bdellozonium Cook and Loomis, 1928

Bdellozonium cerviculatum Cook and Loomis, 1928

TYPE LOCALITY.—Belden, Plumas County.
Occurrence in California.—Published records: Del Norte, El Dorado, Fresno, Humboldt, Mariposa, Monterey, Placer, Shasta, Tuolumne, and Tulare counties. New records: None.

Reference.—Shelley 1997a.

Bdellozonium quicki (Chamberlin, 1954)

Type locality.—Chowchilla Mountain, 0.75 mi (1.2 km) N Signal Peak, Mariposa County.

Occurrence in California.—Published record: Mariposa County (known only from the type locality).

Reference.—Shelley 1997a.

Genus Stenozonium Shelley, 1997

Stenozonium exile Shelley, 1997

Type locality.—Arcata Community Forest near Arcata, Humboldt County.

Occurrence in California.—Published record: Humboldt County. New records: None.

Reference.—Shelley 1997a.

Family Hirudisomatidae

Genus Octoglena Wood, 1864

Octoglena bivirgata Wood, 1864

Type locality.—2 mi (3.2 km) N Ft. Ross, Sonoma County (neotype locality).

Occurrence in California.—Published records: Colusa, Del Norte, Humboldt, Lake, Marin, Mendocino, Napa, San Mateo, Santa Clara, Santa Cruz, and Sonoma counties. New records: None.

Reference.—Shelley 1995a.

Octoglena sierra Shelley, 1995

Type locality.—4 mi (6.4 km) W Newcastle, Placer County.

Occurrence in California.—Published records: Placer County. New records: None.

Reference.—Shelley 1995a.

Genus Brachycybe Wood, 1864

Brachycybe californica (Karsch, 1880)

Type locality.—California without further specification.

Occurrence in California.—Unknown.

Remarks.—Hoffman (1999) thought this species should be regarded as valid until the type specimen, in the Zoologisches Museum der Humboldt-Universität, Berlin, Germany, could be examined. He suggested that it might be a senior name to *B. producta* Loomis.

Brachycybe pica Gardner, 1975

Type locality.—1 mi (1.6 km) N Mendocino, Mendocino County.

Occurrence in California.—Published records: Marin and Mendocino counties. New records: Marin Co., Sam P. Taylor State Park (UCD), Mill Valley (BMNH), and Lagunetas Canyon (FSCA). Mendocino Co., 5 mi (8 km) E Anchor Bay (AMNH).

Reference.—Gardner 1975.

Brachycybe producta Loomis, 1936

Type locality.—Baja California Norte.

Occurrence in California.—Published records: Amador, Calaveras, El Dorado, Lake, Marin, Mariposa, Napa, Nevada, Placer, Sacramento, Shasta, Solano, Sonoma, and Tuolumne counties. New records: Butte Co., Forest Ranch (NCSM) and 2.5 mi (4.0 km) SW Cherokee (WSU).


Brachycybe rosea Murray, 1877

Type locality.—3 mi (4.8 km) SW Placerville, El Dorado County (neotype locality).

Occurrence in California.—Published records: El Dorado, Nevada, Plumas, and Shasta counties. New records: Butte Co., 4 mi (6.4 km) SW Stirling City (LACMNH), Big Bear Mountain near Pulga (NMNH), and Forest Ranch (NCSM). Lassen Co., Monton (FSCA). Mendocino Co., 4.1 mi (6.6 km) SW Leggett (AMNH). Placer Co., 5 mi (8 km) N Placerville (NCSM). Sierra Co., Sierra City (AMNH). Tehama Co., Deer Creek (NMNH), S of Lassen Peak (NMNH), and Dales, 10 mi (16 km) E Red Bluff (NCSM). Yuba Co., 5 mi (8 km) N Smartville (UCB) and 1 mi (1.6 km) W Strawberry Valley Ranger Station (UCB).

Reference.—Gardner 1975.

Genus Gosodesmus Chamberlin, 1922

Gosodesmus claremontus Chamberlin, 1922

Type locality.—Claremont, Los Angeles County.

Reference.—Gardner 1975.

Genus Ischnocybe Cook and Loomis, 1928

*Ischnocybe plicata* Cook and Loomis 1928

Type locality.—14 mi (22.4 km) up North Fork of Feather River from Belden, Plumas County.

Occurrence in California.—Published records: Plumas County. New records: Humboldt Co., Highway of Giants, 2 mi (3.2 km) N Mendocino County line (AMNH). Sonoma Co., locality not specified (BMNH).

Reference.—Gardner 1975.

Genus Mitocybe Cook and Loomis, 1928

*Mitocybe auriportae* Cook and Loomis, 1928

Type locality.—Mount Tamalpais, Marin County.

Occurrence in California.—Published record: Marin County (known only from the type locality).

Reference.—Gardner 1975.

Order Siphonophorida

Family Siphonorhinidae

Genus Illacme Cook and Loomis, 1928

*Illacme plenipes* Cook and Loomis, 1928

Type locality.—Near the divide between Salinas and San Juan Bautista, San Benito County.

Occurrence in California.—Published record: San Benito County (known only from the type locality).

Reference.—Shelley 1996a.

Remarks.—*Illacme plenipes* is the millipede and the animal with the most legs; a female paratype has 750. I have searched in the vicinity of the type locality several times without finding more specimens. Re-collection of *I. plenipes* is much to be desired.

Family Siphonophoridae

Undetermined genus and species

Occurrence in California.—Published records: Los Angeles and Orange counties. New records: None.

Reference.—Shelley 1996a.

Genus Brachyiulus Verhoeff, 1898

*Brachyiulus lusitanus* Verhoeff, 1898

Type locality.—Portugal.


Reference.—Reeves 2000.

Genus Cylindroiulus Verhoeff, 1893

*Cylindroiulus caeruleocinctus* (Wood, 1864)

Type locality.—Pennsylvania.


References.—None.

Remarks.—*Cylindroiulus caeruleocinctus* is a new species for California.

*Cylindroiulus latestriatus* (Curtis, 1845)

Type locality.—England.


Reference.—Chamberlin 1914.

Remarks.—Buckett (1964) said that this species occurs from Los Angeles as far north as San Francisco Bay.

*Cylindroiulus truncorum* (Silvestri, 1896)

Type locality.—Tunisia.


References.—None.

Remarks.—*Cylindroiulus truncorum* is a new record for California.

*Genus Ophiulus* Berlese, 1884

*Ophiulus pilosus* (Newport, 1843)

Type locality.—England.


References.—None.

Remarks.—*Ophiulus pilosus* is a new record for California.

Family Nemastomatidae

*Genus Orinisobates* Lohmander, 1932

*Orinisobates expressus* (Chamberlin, 1941)

Type locality.—Washington.

Occurrence in California.—Published record: Glenn County. New records: Shasta Co., along California highway 89 near Bartle (UCD). Trinity Co., 4 mi (6.4 km) S Hayfork (UCB).


Family Paeromopodidae

*Genus Californius* Verhoeff, 1938

*Californius blechrostriatus* Shelley and Bauer, 1997

Type locality.—Saline Valley, Death Valley National Park, Inyo County.


Reference.—Shelley and Bauer 1997a.

*Californius chamberlini* (Brolemann, 1922)

Type locality.—Mt. Shasta, Siskiyou County.

Occurrence in California.—Published records: Shasta and Siskiyou counties. New records: None.

Reference.—Shelley 1994a.

*Californius dorsocittatus* Verhoeff, 1938

Type locality.—Mt. Harkness, Lassen Volcanic National Park, Plumas County.

Occurrence in California.—Published records: Lassen, Plumas, Shasta, Siskiyou, and Tehama counties. New records: None.

References.—Shelley 1994a, Shelley and Bauer 1997a.

*Californius yosemitensis* Chamberlin, 1941

Type locality.—Aspen Valley, Yosemite National Park, Tuolumne County.

Occurrence in California.—Published records: Butte, Fresno, Kern, Lassen, Madera, Mariposa, Modoc, Mono, Nevada, Placer, Plumas, Shasta, Sierra, Tulare, and Tuolumne counties. New record: County unknown (either Placer or El Dorado), Lake Tahoe (BMNH).

References.—Shelley 1994a, Shelley and Bauer 1997a.

*Genus Paeromopus* Karsch, 1881

*Paeromopus angusticeps angusticeps* (Wood, 1864)

Type locality.—Oakland, Alameda County (neotype locality).

Occurrence in California.—Published records: Alameda, Marin, Monterey, Santa Clara, and Santa Cruz counties. New records: None.

References.—Shelley 1994a, Shelley and Bauer 1997a.

*Paeromopus angusticeps buttensis* Chamberlin, 1954

Type locality.—Big Bar Mountain E Pulga, Butte County.

Occurrence in California.—Published records: Amador, Butte, Calaveras, El Dorado, Humboldt, Lake, Mendocino, Nevada, Placer,
Plumas, Shasta, Sierra, Solano, Sonoma, Trinity, Tuolumne, Yolo, and Yuba counties. New records: None.


**Paeromopus angusticeps intergrades**

**Occurrence in California.**—Published records: Solano and Sonoma counties. New records: None.

REFERENCE.—Shelley and Bauer 1997.

**Paeromopus caricolens** Chamberlin, 1949

**Type locality.**—Windeler Cavern, ca 8 mi (12.8 km) N Columbia, Tuolumne County.

**Occurrence in California.**—Published record: Tuolumne County (known definitely only from the type locality).

REFERENCE.—Shelley 1994a.

**Paeromopus eldoradus** Chamberlin, 1941

**Type locality.**—Coloma, El Dorado County.

**Occurrence in California.**—Published record: El Dorado County (known only from the type locality).

REFERENCE.—Shelley 1994a.

**Paeromopus paniculus** Shelley and Bauer, 1997

**Type locality.**—1.5 mi (2.4 km) W El Portal, Mariposa County.

**Occurrence in California.**—Published record: Mariposa County. New records: None.

REFERENCE.—Shelley and Bauer 1997a.

**Genus Bollmaniulus Verhoeff, 1926**

**Bollmaniulus pachysonus** (Chamberlin, 1940)

**Type locality.**—Yosemite National Park, Mariposa/Tuolumne counties.

**Occurrence in California.**—Published record: Mariposa/Tuolumne counties (known only from the type locality).

REFERENCE.—Chamberlin 1940.

**Bollmaniulus pearcei** (Chamberlin, 1943)

**Type locality.**—South Fork of Bishop Creek, Inyo County.

**Occurrence in California.**—Published record: Inyo County (known only from the type locality).

REFERENCE.—Chamberlin 1943a.

**Bollmaniulus rhodogeus** (Chamberlin, 1940)

**Type locality.**—Redlands, San Bernardino County.

**Occurrence in California.**—Published record: San Bernardino County (known only from the type locality).

REFERENCE.—Chamberlin 1940.

**Genus Codiulus Chamberlin, 1940**

**Codiulus etirus** Chamberlin, 1941

**Type locality.**—Cardiff-by-the-Sea, San Diego County.

**Occurrence in California.**—Published record: San Diego County (known only from the type locality).

REFERENCE.—Chamberlin 1941a.

**Codiulus oulogon** Chamberlin, 1940

**Type locality.**—Box Springs/Riverside, Riverside County.

**Occurrence in California.**—Published record: Riverside County (known only from the type locality).

REFERENCE.—Chamberlin 1940.

**Genus Mulaikiulus Chamberlin, 1941**

**Mulaikiulus stanleius** Chamberlin, 1941

**Type locality.**—12 mi (19.2 km) NE Hammond, Tulare County.

**Occurrence in California.**—Published record: Tulare County (known only from the type locality).

REFERENCE.—Chamberlin 1941b.
Genus *Parajulus* Humbert and DeSaussure, 1869

*Parajulus varius* Bollman, 1887

**Type locality.**—San Diego, San Diego County.

**Occurrence in California.**—Published records: Mendocino and San Diego counties, and “Rosario Mission,” county unknown. New records: None.

**References.**—Bollman 1887a, 1887b.

**Remarks.**—This species, listed under “Parajulidae of Uncertain Systematic Position” by Chamberlin and Hoffman (1958) and “Parajulidae of Uncertain Generic Position or Validity” by Hoffman (1999), was described as new twice by Bollman (1887a, 1887b). I cite it here under *Parajulus*, but undoubtedly it belongs to a different genus, a decision that must await comprehensive studies on western components of the family. In the original descriptions, Bollman reported it from San Diego; Ukiah, Mendocino County; and “Rosario Mission,” which was reported to be in Southern California and “Lower California,” i.e., Baja California. Chamberlin and Hoffman (1958) suggested San Diego as a restricted type locality but did not designate a lectotype.

Genus *Simiulus* Chamberlin, 1940

*Simiulus arius* (Chamberlin, 1918)

**Type locality.**—Stanford, Santa Clara County.

**Occurrence in California.**—Published record: Santa Clara County (known only from the type locality).

**Reference.**—Chamberlin 1940.

Genus *Sophiulus* Chamberlin, 1940

*Sophiulus lomondus* Chamberlin, 1941

**Type locality.**—Ben Lomond, Santa Cruz County.

**Occurrence in California.**—Published record: Santa Cruz County (known only from the type locality).

**Reference.**—Chamberlin 1941a.

*Sophiulus tivius* (Chamberlin, 1912)

**Type locality.**—Mill Valley, Marin County.

**Occurrence in California.**—Published records: Marin, San Francisco, and Santa Clara counties. New records: None.

**Reference.**—Chamberlin 1940.

Genus *Spathiulus* Chamberlin, 1940

*Spathiulus elegantulus* Causey, 1950

**Type locality.**—Happy Isle, Yosemite National Park, Mariposa County.

**Occurrence in California.**—Published record: Mariposa County (known only from the type locality).

**Reference.**—Causey 1950.

*Spathiulus leptus* Chamberlin, 1940

**Type locality.**—Yosemite National Park, Mariposa/Tuolumne counties.

**Occurrence in California.**—Published record: Tuolumne County (known only from the type locality).

**Reference.**—Chamberlin 1940.

*Spathiulus tribolus* Chamberlin, 1941

**Type locality.**—Sequoia National Park, 12 mi (19.2 km) N Hammond, Tulare County.

**Occurrence in California.**—Published record: Tulare County (known only from the type locality).

**Reference.**—Chamberlin 1941b.

*Spathiulus tuolumnus* (Chamberlin, 1950)

**Type locality.**—Pinecrest, Tuolumne County.

**Occurrence in California.**—Published record: Tuolumne County (known only from the type locality).

**Reference.**—Chamberlin 1950.

**Remarks.**—Chamberlin and Hoffman (1958) and Hoffman (1999) show this species as having been originally included in *Spathiulus*, but it was actually described in *Sophiulus*.

Genus *Tuniulus* Chamberlin, 1941

*Tuniulus milpitanus* (Chamberlin, 1940)

**Type locality.**—Milpitas, Santa Clara County.

**Occurrence in California.**—Published record: Santa Clara County (known only from the type locality).

**Reference.**—Chamberlin 1940.

**Order Spirobolida**

**Family Atopetholidae**

**Subfamily Arinolinae**

*Arinolus latus* Loomis, 1953

**Type locality.**—Antelope Valley between Lancaster and Palmdale, Los Angeles County.
OCCURRENCE IN CALIFORNIA.—Published record: Los Angeles County. New record: San Bernardino Co., Pisgah Crater (LACMNH).
REFERENCE.—Hoffman and Orcutt 1960.

Genus Piedolus Chamberlin, 1930

Piedolus utus Chamberlin, 1930
TYPE LOCALITY.—Utah.
OCCURRENCE IN CALIFORNIA.—Published record: Inyo County. New records: None.
REFERENCE.—Shelley 2000b.

Subfamily Atopetholinae
Genus Atopetholus Chamberlin, 1918

Atopetholus angelus Chamberlin, 1920
TYPE LOCALITY.—Silver Lake (Edendale suburb), Los Angeles, Los Angeles County.
OCCURRENCE IN CALIFORNIA.—Published record: Los Angeles County. New records: San Diego Co., U.S. International University, Elliott Campus and Scripps Ranch (NCSM, UCD).
REFERENCE.—Hoffman and Orcutt 1960.
REMARKS.—This name may prove to be a junior synonym of A. californicus.

Atopetholus barbaranus Chamberlin, 1949
TYPE LOCALITY.—Orcutt, Santa Barbara County.
OCCURRENCE IN CALIFORNIA.—Published record: Santa Barbara County (known only from the type locality).
REFERENCE.—Hoffman and Orcutt 1960

Atopetholus californicus Chamberlin, 1918
TYPE LOCALITY.—Claremont, Los Angeles/San Bernardino counties.

Atopetholus carmelitus Chamberlin, 1940
TYPE LOCALITY.—Hastings Reservation, Monterey County.
OCCURRENCE IN CALIFORNIA.—Published record: Monterey County (known only from the type locality).

REFERENCE.—Hoffman and Orcutt 1960.

Atopetholus fraterinus Chamberlin, 1918
TYPE LOCALITY.—Friant, Fresno County.
OCCURRENCE IN CALIFORNIA.—Published record: Fresno County. New record: Kings Co., Avenal (AMNH).
REFERENCE.—Hoffman and Orcutt 1960.

Atopetholus paroicus Chamberlin, 1941
TYPE LOCALITY.—Mountain Springs, Imperial County.
OCCURRENCE IN CALIFORNIA.—Published record: Imperial County (known only from the type locality).
REFERENCE.—Hoffman and Orcutt 1960.

Atopetholus pearcei Chamberlin, 1950
TYPE LOCALITY.—Oildale, Kern County.
OCCURRENCE IN CALIFORNIA.—Published record: Kern County (known only from the type locality).
REFERENCE.—Hoffman and Orcutt 1960.

Atopetholus wheeleri (Chamberlin, 1918), new combination
TYPE LOCALITY.—Cold Spring Canyon, Santa Ynez Mountains, Santa Barbara County.
OCCURRENCE IN CALIFORNIA.—Published record: Santa Barbara County (known only from the type locality).
REMARKS.—Hoffman (1999) considered Hesperolus a questionable synonym of Atopetholus but nevertheless listed H. wheeleri, making the combination with Atopetholus new.

Atopetholus sp.
OCCURRENCE IN CALIFORNIA.—Kern County, Erskine Canyon SE of Kernville (LACMNH). Riverside County, Joshua Tree National Park, Pinyon Wells (LACMNH).
REMARKS.—For completion I list here counties from which unidentified species of Atopetholus have been taken.

Genus Orthichelus Chamberlin and Hoffman, 1950
Orthichelus michelbacheri (Verhoeff, 1938)
TYPE LOCALITY.—Walker Pass, 6 mi (9.6 km) NW Freeman, Kern County.
Genus *Tidolus* Chamberlin, 1949

*Tidolus parvus* Chamberlin, 1918

Type locality.—Claremont, Los Angeles County.


Reference.—Hoffman and Orcutt 1960.

Genus *Watichelus* Chamberlin, 1949

*Watichelus edentatus* Loomis, 1949

Type locality.—Between San Diego and El Centro, San Diego/Imperial counties.

Occurrence in California.—Published record: San Diego/Imperial counties (known only from the type locality).

Reference.—Hoffman and Orcutt 1960.

*Watichelus parallelus* Loomis, 1949

Type locality.—Chula Vista, San Diego County.

Occurrence in California.—Published record: San Diego County (known only from the type locality).

Reference.—Hoffman and Orcutt 1960.

*Watichelus robustus* Loomis, 1949

Type locality.—Chula Vista, San Diego County.

Occurrence in California.—Published record: San Diego County (known only from the type locality).

Reference.—Hoffman and Orcutt 1960.

*Watichelus smithi* (Chamberlin, 1947)

Type locality.—Murray Canyon, 3 mi (4.8 km) N Palm Springs, Riverside County.

Occurrence in California.—Published record: Riverside County (known only from the type locality).

Reference.—Hoffman and Orcutt 1960.

Subfamily Onychelinae

Genus *Onychelus* Cook, 1904

*Onychelus obustus* Cook, 1904

Type locality.—Colorado Desert, Riverside County.

Occurrence in California.—Published record: San Bernardino, San Diego, and Riverside counties. New records: None.


Genus *Tylobolus* Cook, 1904

*Tylobolus castaneus* Chamberlin, 1918

Type locality.—Brookdale, Santa Cruz County.

Occurrence in California.—Published records: Alameda, Amador, Contra Costa, Fresno, Mariposa, Sacramento, San Joaquin, Sonoma, Stanislaus, and Tehama counties. New records: None.

Reference.—Keeton 1960.
Santa Clara, Santa Cruz, and Tulare counties. *New record:* El Dorado Co., 1 mi (1.6 km) E Pacific House (NCSM).


**Tylobolus claremontus** Chamberlin, 1918

**Type locality.**—Claremont, Los Angeles County.

**Occurrence in California.**—*Published records:* Los Angeles, Riverside, and San Diego counties. *New records:* None.


**Tylobolus deses deses** Cook, 1904

**Type locality.**—California without further specification; stated to be Stanford University, Santa Clara County, by Buckett and Gardner (1966).

**Occurrence in California.**—*Published records:* Marin, San Mateo, Santa Cruz, and Sonoma counties. *New records:* None.


**Tylobolus deses magnificus** Buckett and Gardner, 1966

**Type locality.**—2 mi (3.2 km) W Cordelia, Solano County.


**Tylobolus loomisi** Keeton, 1966

**Type locality.**—South of Ft. Tejon, Kern County.

**Occurrence in California.**—*Published records:* Kern, Santa Barbara, and Ventura counties. *New records:* None.

**Reference.**—Keeton 1966.

**Tylobolus monachus** (Chamberlin, 1949)

**Type locality.**—Hastings Reservation, Monterey County.

**Occurrence in California.**—*Published records:* Fresno and Monterey counties. *New records:* None.

**Reference.**—Keeton 1960.

**Tylobolus uncigerus** (Wood, 1864)

**Type locality.**—California without further specification; restricted by Keeton (1960) to Solano County.

**Occurrence in California.**—*Published records:* Contra Costa, Humboldt, Mariposa, Sacramento, San Joaquin, Santa Cruz, and Solano counties. *New records:* Butte, Colusa, Glenn, Humboldt, Lake, Marin, Mendocino, Napa, Santa Clara, Shasta, Sonoma, Tehama, Trinity, and Yolo cos. (CDFA, FSCA, MCZ, UCB, UCD)


**Tylobolus utahensis** Chamberlin, 1925

**Type locality.**—Utah

**Occurrence in California.**—*Published record:* Inyo County. *New records:* None.

**Reference.**—Shelley and Bauer 1997b.

**Order Spirostreptida**

**Family Cambalidae**

**Genus Alakene** Chamberlin, 1941

**Alakene simplex** Chamberlin, 1941

**Type locality.**—5 mi (8 km) NE Lemontcove, Tulare County.

**Occurrence in California.**—*Published record:* Tulare County (known only from the type locality).

**Reference.**—Chamberlin 1941b.

**Genus Buwatia** Chamberlin, 1912

**Buwatia monterea** Chamberlin, 1912

**Type locality.**—Pacific Grove, Monterey County.

**Occurrence in California.**—*Published record:* Monterey County (known only from the type locality).

**References.**—Chamberlin 1912, Loomis 1938.

**Genus Doilene** Chamberlin, 1941

**Doilene carmela** Chamberlin, 1941

**Type locality.**—Hastings Reservation, Monterey County.

**Occurrence in California.**—*Published record:* Monterey County (known only from the type locality).

**Reference.**—Chamberlin 1941a.
Genus *Endere* Loomis, 1938

*Endere disora* Loomis, 1938

_Type locality._—Sunnyside Mine near Seneca, Plumas County.

_Occurrence in California._—Published record: Plumas County (known only from the type locality).

_References._—Loomis 1938.

Genus *Leiodere* Loomis, 1938

*Leiodere angelorum* Chamberlin, 1943

_Type locality._—Los Angeles, Los Angeles County.

_Occurrence in California._—Published record: Los Angeles County (known only from the type locality).

_References._—Chamberlin 1943a.

*Leiodere dasyura* Loomis, 1938

_Type locality._—Tajiguas, Santa Barbara County.

_Occurrence in California._—Published record: Santa Barbara County (known only from the type locality).

_References._—Loomis 1938.

*Leiodere nana* Loomis, 1938

_Type locality._—Between Vallejo and Cordelia, Solano County.

_Occurrence in California._—Published record: Solano County (known only from the type locality).

_References._—Loomis 1938.

*Leiodere torreyana* Loomis, 1938

_Type locality._—Torrey Pines State Beach and Reserve, San Diego County.

_Occurrence in California._—Published record: San Diego County (known only from the type locality).

_References._—Loomis 1938.

*Genus Nannolene* Bollman, 1887

*Nannolene burkei* (Bollman, 1887)

_Type locality._—Ukiah, Mendocino County.

_Occurrence in California._—Published record: Mendocino County (known only from the type locality).

_References._—Chamberlin 1922, Loomis 1938.

_Remarks._—Without providing a written account, Chamberlin (1922, pl. 1, figs. 4–10) published drawings of a male from an unknown locality. As noted by Hoffman (1999), there is no reason to believe that this species is either conspecific or congeneric with the type specimens.

*Nannolene catalina* Chamberlin, 1941

_Type locality._—Hamilton Canyon, Santa Catalina Island, Los Angeles County.

_Occurrence in California._—Published record: Santa Catalina Island, Los Angeles County. _New records:_ None.

_References._—Chamberlin 1941a.

*Nannolene corticolen* Chamberlin, 1951

_Type locality._—Base of Mt. Diablo, Contra Costa County.

_Occurrence in California._—Published record: Contra Costa County (known only from the type locality).

_References._—Chamberlin 1951.

*Nannolene dorothea* Chamberlin, 1941

_Type locality._—One of 3 sites in Kern County (Isabella, Kernville, or Squaw Valley) or 1 mi (1.6 km) E Hammond, Tulare County.

_Occurrence in California._—Published records: Kern and Tulare counties. _New records:_ None.

_References._—Chamberlin 1941b.

*Nannolene keiferi* Chamberlin, 1943

_Type locality._—Near Sacramento, Sacramento County.

_Occurrence in California._—Published record: Sacramento County (known only from the type locality).

_References._—Chamberlin 1943b.

*Nannolene minor* Loomis, 1938

_Type locality._—Near Bakersfield, Kern County.

_Occurrence in California._—Published record: Kern County (known only from the type locality).

_References._—Loomis 1938.

*Nannolene personifer* Chamberlin, 1941

_Type locality._—9 mi (14.4 km) N Placerville, El Dorado County.

_Occurrence in California._—Published record: El Dorado County (known only from the type locality).

_References._—Chamberlin 1941b.
Nannolene violacea Loomis, 1938

Type locality.—South of Atascadero, San Luis Obispo County.

Occurrence in California.—Published records: Kern and San Luis Obispo counties. New records: None.

Reference.—Loomis 1938.

Genus Odachurus Loomis, 1938

Odachurus petasatus Loomis, 1938

Type locality.—Torrey Pines State Beach and Reserve, San Diego County.

Occurrence in California.—Published record: San Diego County (known only from the type locality).

Reference.—Loomis 1938.

Genus Paiteya Chamberlin, 1910

Paiteya errans Chamberlin, 1910

Type locality.—Southern California without further specification.

Occurrence in California.—No definite localities known.

References.—Chamberlin 1910, Loomis 1938.

Genus Pharodere Loomis, 1938

Pharodere radiata Loomis, 1938

Type locality.—Torrey Pines State Beach and Reserve, San Diego County.

Occurrence in California.—Published record: San Diego County. New records: None.

Reference.—Loomis 1938.

Genus Platydere Loomis, 1938

Platydere caeca Loomis, 1938

Type locality.—Tajiguas, Santa Barbara County.

Occurrence in California.—Published record: Santa Barbara County (known only from the type locality).

Reference.—Loomis 1938.

Genus Tigolene Chamberlin, 1941

Tigolene clementinus Chamberlin, 1941

Type locality.—San Clemente Island, Los Angeles County.

Occurrence in California.—Published record: San Clemente Island, Los Angeles County (known only from the type locality).

Reference.—Chamberlin 1941a.

Genus Titsona Chamberlin, 1912

Titsona sini Chamberlin, 1912

Type locality.—Oroville, Butte County.

Occurrence in California.—Published records: Butte and Yolo counties. New records: None.

References.—Chamberlin 1912, Loomis 1938, Chamberlin and Hoffman 1958.

Unknown Cambalidae

Occurrence in California.—Alameda, Colusa, Del Norte, Glenn, Los Angeles, Monterey, Napa, Orange, Plumas, Riverside, San Bernardino, Shasta, Stanislaus, Tehama, Trinity, Yolo, and Yuba counties (AMNH, CAS, CDFA, FSCA, LACMNH, NCSM, NMNH, UCB).

Remarks.—As western Cambalidae have not been revised and the distinctions between genera are unclear, I list here unidentified samples I have seen from other counties in California.

Superorder Nematophora

Order Chordeumatida

Family Apterouridae

Genus Apterourus Loomis, 1966

Apterourus horizontalis Loomis, 1966

Type locality.—Cajon Pass, San Bernardino County.

Occurrence in California.—Published record: San Bernardino County (known only from the type locality).

References.—Loomis 1966, Shear 1977.

Family Caseyidae

Genus Caseya Cook and Collins, 1895

Caseya bucketti Gardner and Shelley, 1989

Downloaded From: https://bioone.org/journals/Monographs-of-the-Western-North-American-Naturalist on 17 Oct 2019
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Caseya coxalis Loomis, 1966

Type locality.—Davenport, Santa Cruz County.

Occurrence in California.—Published records: San Mateo and Santa Cruz counties. New records: None.


Caseya dorada (Chamberlin, 1941)

Type locality.—9 mi (14.4 km) N Placerville, El Dorado County.

Occurrence in California.—Published records: Amador, Calaveras, El Dorado, Nevada, Placer, and Sacramento counties. New records: None.


Caseya guttata Gardner and Shelley, 1989

Type locality.—4 mi (6.4 km) E Sunny Brae, Humboldt County.

Occurrence in California.—Published record: Humboldt County. New records: None.


Caseya heteropa disjuncta Gardner and Shelley, 1989

Type locality.—3 mi (4.8 km) W Forestville, Sonoma County.

Occurrence in California.—Published records: Napa, Solano, Sonoma, and Yolo counties. New record: Lake Co., Cobb Mountain, Kelsey Creek (NMNH).


Caseya heteropa heteropa Cook and Collins, 1895

Type locality.—An unspecified locality in Marin County.

Occurrence in California.—Published records: Alameda, Marin, Monterey, San Benito, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma counties. New records: None.


Caseya heteropa montana Gardner and Shelley, 1989

Type locality.—6 mi (9.6 km) S El Dorado, El Dorado County.

Occurrence in California.—Published records: Amador, Butte, Calaveras, Colusa, El Dorado, Mariposa, and Tuolumne counties. New records: None.


Caseya heteropa oraria Gardner and Shelley, 1989

Type locality.—5 mi (8 km) NE Mendocino, Mendocino County.

Occurrence in California.—Published records: Humboldt and Mendocino counties. New records: None.


Caseya longiloba Gardner and Shelley, 1989

Type locality.—1.5 mi (2.4 km) SW Douglas City, Trinity County.

Occurrence in California.—Published record: Trinity County. New records: None.


Caseya occidentalis Gardner and Shelley, 1989

Type locality.—Del Puerto Canyon, 12 mi (19.2 km) W Patterson, Stanislaus County.

Occurrence in California.—Published record: Stanislaus County (known only from the type locality).


Caseya paradoxa Gardner and Shelley, 1989

Type locality.—2 mi (3.2 km) E Briceburg, Mariposa County.

Occurrence in California.—Published record: Mariposa County. New records: None.


Caseya prionota Gardner and Shelley, 1989

Type locality.—14 mi (22.4 km) E Briceburg, Mariposa County.

Occurrence in California.—Published records: Fresno, Madera, and Mariposa counties. New records: None.


Caseya sequoia Chamberlin, 1941

Type locality.—12 mi (19.2 km) NE Hammond, Tulare County.

Occurrence in California.—Published record: Tulare County. New records: None.

Caseya shastensis Gardner and Shelley, 1989
Type locality.—18 mi (28.8 km) W Redding, Shasta County.
Occurrence in California.—Published record: Shasta County. New records: None.

Caseya similis Causey, 1952
Type locality.—Tehachapi Pass, Kern County.
Occurrence in California.—Published records: Kern and Los Angeles counties. New records: None.

Caseya taliae Gardner and Shelley, 1989
Type locality.—10 mi (16 km) NE Auberry, Fresno County.
Occurrence in California.—Published records: Fresno and Madera counties. New records: None.

Caseya sp.
Remarks.—For completion I cite here additional counties from which unidentifiable specimens of Caseya have been collected.

Genus Ochrogramma Gardner and Shelley, 1989

Ochrogramma haigi Gardner and Shelley, 1989
Type locality.—5 mi (8 km) SW Gasquet, Del Norte County.
Occurrence in California.—Published record: Del Norte County. New records: None.

Genus Opiona Chamberlin, 1951

Opiona beryssae Gardner and Shelley, 1989
Type locality.—12 mi (19.2 km) W Winters, Napa County.
Occurrence in California.—Published record: Napa County (known only from the type locality).

Opiona bifurcata Gardner and Shelley, 1989
Type locality.—Russian Gulch State Park, Mendocino County.
Occurrence in California.—Published record: Mendocino County. New records: None.

Opiona communis angusta Gardner and Shelley, 1989
Type locality.—6 mi (9.6 km) SSE Santa Rosa, Sonoma County.
Occurrence in California.—Published records: Marin and Sonoma counties. New records: None.

Opiona communis communis Gardner and Shelley, 1989
Type locality.—3 mi (4.8 km) N Kenwood, Sonoma County.
Occurrence in California.—Published records: Santa Cruz, Solano, and Sonoma counties. New records: None.

Opiona communis prolixa Gardner and Shelley, 1989
Type locality.—7 mi (11.2 km) W Oakville, Napa County.
Occurrence in California.—Published record: Napa and Sonoma counties. New records: None.

Opiona distincta Gardner and Shelley, 1989
Type locality.—2.5 mi (4.0 km) SE Guerneville, Sonoma County.
Occurrence in California.—Published record: Sonoma County (known only from the type locality).

Opiona exigua Gardner and Shelley, 1989
Type locality.—5 mi (8 km) SW Gasquet, Del Norte County.
Occurrence in California.—Published records: Mendocino and Sonoma counties. New records: None.

Opiona fisheri Gardner and Shelley, 1989
Type locality.—Oregon.
Occurrence in California.—Published records: None. New record: Siskiyou Co., 8 mi (12.8 km) S Dunsmuir (UCB).


Remarks.—Opiona fisheri is a new record for California.

Opiona siliquae Causey, 1963

Type locality.—Fault Rock Cave near Spy Rock, Mendocino County.

Occurrence in California.—Published record: Mendocino County (known only from the type locality).


Genus Speoseya Causey, 1963

Speoseya grahemi Causey, 1963

Type locality.—Shaw’s Cave, Calaveras County.

Occurrence in California.—Published record: Calaveras County (known only from the type locality).

Reference.—Causey 1963.

Family Conotylidae

Subfamily Conotylinae

Genus Plumatyla Shear, 1971

Plumatyla humerosa (Loomis, 1943)

Type locality.—Sunnyside Mine, 3 mi (4.8 km) SW Seneca, Plumas County.

Occurrence in California.—Published records: Plumas and Siskiyou counties. New records: None.

Reference.—Shear 1971.

Genus Taijutyla Chamberlin, 1952

Taijutyla extorris (Shear, 1971)

Type locality.—1 mi (1.6 km) S Grass Valley, Nevada County.

Occurrence in California.—Published record: Nevada County (known only from the type locality).

References.—Shear 1971, 1976.

Taijutyla francisca Shear, 1971

Type locality.—1 mi (1.6 km) SE Inverness, Marin County.

Occurrence in California.—Published record: Marin County (known only from the type locality).

References.—Shear 1971, 1976.

Taijutyla napa Shear, 1971

Type locality.—Mount St. Helena, Napa County.

Occurrence in California.—Published record: Napa County (known only from the type locality).

References.—Shear 1971, 1976.

Family Rhiscosomididae

Genus Rhiscosomides Silvestri, 1909

Rhiscosomides acovescor Shear, 1972

Type locality.—Samuel P. Taylor State Park, Marin County.

Occurrence in California.—Published record: Marin County (known only from the type locality).


Rhiscosomides montereum Chamberlin, 1910

Type locality.—Pacific Grove, Monterey County.

Occurrence in California.—Published record: Monterey County (known only from the type locality).


Rhiscosomides trinitarium Shear, 1973

Type locality.—Butter Creek, 12 mi (19.2 km) SE Hyampom, Trinity County.

Occurrence in California.—Published record: Trinity County (known only from the type locality).


Rhiscosomides sp.

Occurrence in California.—Del Norte County, Jedediah Smith State Park (UID). San Mateo County, summit of La Honda grade (FSCA) and 6 mi (9.6 km) SE Half Moon Bay (NMNH). Santa Clara County, 5.2 mi (8.3 km) SW Stevens Creek Dam (UCD). Santa Cruz County, Empire Cave (FSCA) and mountains between Santa Cruz and Holy City (NMNH).

Reference.—None.

Remarks.—I have not attempted to identify these tiny millipedes, and so I combine under this category all samples of Rhiscosomides that I have seen from California.

Family Striariidae

Genus Striaria Bollman, 1888

Striaria californica Cook, 1899
**Genus Striaria Chamberlin, 1947**

*Striaria carmela* Chamberlin, 1947

*Striaria eldora* Chamberlin, 1953

*Striaria eutypa* (Chamberlin, 1941)

*Striaria nana* Loomis, 1936

*Striaria sp.*

**Genus Speostriaria Causey, 1960**

*Speostriaria shastae* (Causey, 1958)

**Genus Vaferaria Causey, 1958**

*Vaferaria imberbis* (Loomis, 1936)

**Order Callipodida**

**Family Schizopetalidae**

**Subfamily Tynommatinae**

**Tribe Colactidini**

**Genus Colactis Loomis, 1937**

*Colactis protenta* Loomis, 1937

*Colactis tiburona* (Chamberlin, 1923)

**Genus Heptium Loomis, 1937**

*Heptium carinellum* Loomis, 1937

*Heptium scamillatum* Loomis, 1937
Occurrence in California.—Published records: Riverside and San Bernardino counties. New records: None.
Reference.—Shelley 1996b.

Tribe Diactidini
Genus Caliactis Shelley, 1996

Caliactis bistolata Shelley, 1996

Type locality.—Mission Viejo, Orange County.

Occurrence in California.—Published record: Orange County (known only from the type locality).
Reference.—Shelley 1996b.

Genus Diactis Loomis, 1937

Diactis amniscela Shelley, 1996

Type locality.—Banning, Riverside County.

Occurrence in California.—Published record: Riverside County (known only from the type locality).
Reference.—Shelley 1996b.

Diactis cupola Shelley, 1996

Type locality.—3 mi (4.8 km) from Santa Monica, Los Angeles County.

Occurrence in California.—Published record: Los Angeles County. New records: None.
Reference.—Shelley 1996b.

Diactis frondifera Loomis, 1937

Type locality.—Torrey Pines State Beach and Reserve, San Diego County.

Occurrence in California.—Published records: Los Angeles and San Diego counties. New records: None.
Reference.—Shelley 1996b.

Diactis jacinto Shelley, 1996

Type locality.—San Jacinto Mountains south of Banning, Riverside County.

Occurrence in California.—Published record: Riverside County (known only from the type locality).
Reference.—Shelley 1996b.

Diactis procera Shelley, 1996

Type locality.—Silverado Canyon ca 11 mi (17.6 km) N Mission Viejo, Orange County.

Occurrence in California.—Published record: Orange County (known only from the type locality).

Diactis soleata Loomis, 1937

Type locality.—Along Temescal Canyon Road ca 10.2 mi (16.3 km) S Corona, Riverside County.

Occurrence in California.—Published records: Los Angeles and Riverside counties. New records: None.
Reference.—Shelley 1996b.

Diactis strumella Shelley, 1996

Type locality.—Laguna Beach, Orange County.

Occurrence in California.—Published record: Orange County (known only from the type locality).
Reference.—Shelley 1996b.

Diactis triangula Loomis, 1937

Type locality.—Ca 46 mi (73.6 km) E San Diego, San Diego County.

Occurrence in California.—Published records: Los Angeles, San Bernardino, and San Diego counties. New records: None.
Reference.—Shelley 1996b.

Genus Florea Shelley, 1996

Florea sinuata Shelley, 1996

Type locality.—Trabuco Ranger District, Cleveland National Forest, Orange County.

Occurrence in California.—Published record: Orange County (known definitely only from the paratype locality).
Reference.—Shelley 1996b.

Tribe Tynommatini
Genus Tynomma Loomis, 1937

Tynomma magnum Buckett and Gardner, 1969

Type locality.—7 mi (11.8 km) E Monterey, Monterey County.

Occurrence in California.—Published record: Monterey County. New records: None.
Reference.—Shelley 1996b.

Tynomma mutans (Chamberlin, 1910)

Type locality.—Stanford, Santa Clara County.

Occurrence in California.—Published records: Alameda, Contra Costa, Marin, San

Reference.—Shelley 1996b.

_Tynomma schlingeri_ Gardner, 1973

_Type locality._—Frank Raines Park, Del Puerto Canyon, Stanislaus County.

_Occurrence in California._—_Published record:_ Santa Clara and Stanislaus counties. 
New records: None.


Remarks.—As explained by Hoffman (1999), Shelley (1996b) redescribed this species based on the type specimens of _T. schlingeri_ and renamed it _T. gardneri_, a rare example of an objective synonym.

_Superorder Merocheta_

_Order Polydesmida_

_Family Fuhrmannodesmidae_

_Genus Phreatodesmus_ Loomis, 1960

**Phreatodesmus cooki** Loomis, 1960

_Type locality._—Tehachapi Pass, Kern County.

_Occurrence in California._—_Published record:_ Kern County (known only from the type locality).

Reference.—Loomis 1960.

**Phreatodesmus dentatus** Loomis, 1960

_Type locality._—Cajon Pass, San Bernardino County.

_Occurrence in California._—_Published record:_ San Bernardino County (known only from the type locality).

Reference.—Loomis 1960.

**Phreatodesmus hastingsus** (Chamberlin 1941)

_Type locality._—Hastings Reservation, Monterey County.

_Occurrence in California._—_Published record:_ Monterey County (known only from the type locality).

References.—Loomis 1960, Shelley 1997b.

Remarks.—Shelley (1997b) outlined the confusion that surrounds this species, and, as noted by Hoffman (1999), placement in _Phreatodesmus_ is entirely speculative.

**Phreatodesmus torreyanus** Loomis, 1960

_Type locality._—Torrey Pines State Beach and Reserve, San Diego County.

_Occurrence in California._—_Published records:_ Riverside and San Diego counties. 
New records: None.

Reference.—Loomis 1960.

_Genus Tidesmus_ Chamberlin, 1943

**Tidesmus episcopus** Chamberlin, 1943

_Type locality._—Bishop’s Road, Reservoir Hill, Los Angeles County.

_Occurrence in California._—_Published records:_ Los Angeles County (known only from the type locality).

Reference.—Chamberlin 1943c.

_Family Nearctodesmidae_

_Genus Harpogonopus_ Loomis, 1960

**Harpogonopus confluentus** Loomis, 1960

_Type locality._—45 mi (72 km) E San Diego, San Diego County.

_Occurrence in California._—_Published records:_ Los Angeles, Orange, San Diego, Santa Barbara, and Ventura counties. New records: None.

References.—Loomis 1960, Shelley 1993a, 1994b.

Remarks.—Buckett (1964) spelled the genus correctly, but Hoffman (1980, 1999) and Shelley (1993a) misspelled it as “Harpagonopus.” Shelley (1993a) followed Hoffman (1980) in considering the genus of uncertain family position in the Trichopolydesmoidea, but the following year he (Shelley 1994b) assigned it to the Nearctodesmidae.

**Genus Nearctodesmus** Silvestri, 1910

**Nearctodesmus cerasinus** (Wood, 1864)

_Type locality._—Oregon.

_Occurrence in California._—_Published records:_ Del Norte, Humboldt, Mendocino, and Siskiyou counties. New records: None.

Reference.—Shelley 1994b.

**Nearctodesmus salix** Chamberlin, 1949

_Type locality._—12 mi (19.2 km) W Willow Creek (town), Humboldt County.

_Occurrence in California._—_Published records:_ Humboldt, Marin, Mendocino, Sonoma, and Trinity counties. New records: None.
REFERENCE.—Shelley 1994b.

Family Paradoxosomatidae
Tribe Australiosomatini
Genus Akamptogonus Attems, 1914
Akamptogonus novarae (Humbert and DeSaussure, 1869)

Type locality.—New Zealand.


References.—Hoffman 1979, Shelley et al. 1998.

Remarks.—Shelley et al. (1998) recorded California counties for this species, to which I now add locality details.

Tribe Sulciferini
Genus Oxidus Cook, 1911
Oxidus gracilis (C. L. Koch, 1847)

Type locality.—Austria (from a greenhouse).


Reference.—Buckett 1964.

Remarks.—Buckett (1964) stated that this introduced, synanthropic diplopod occurs throughout the western United States. It is one of the few millipedes with a common name, the hothouse or greenhouse milliped, and unquestionably occurs in urban environments in all counties of California.

Family Polydesmidae
Genus Bidentogon Buckett and Gardner, 1968
Bidentogon californicus (Chamberlin, 1918)

Type locality.—Sacramento, Sacramento County.

Occurrence in California.—Published record: Sacramento County (known only from the type locality).

Reference.—Shear 1972.

Bidentogon helferorum Buckett and Gardner, 1968

Type locality.—1 mi (1.6 km) N Mendocino, Mendocino County.

Occurrence in California.—Published records: Alameda and Mendocino counties. New records: None.

Reference.—Buckett and Gardner 1968a, Shear 1972.

Genus Calianotus Shelley, 1997
Calianotus bituberculatus (Loomis, 1960)

Type locality.—Niles Canyon, Alameda County.

Occurrence in California.—Published records: Alameda and Contra Costa counties. New records: None.

Reference.—Shelley 1997b.

Calianotus sastianus (Chamberlin, 1910)

Type locality.—8 mi (12.8 km) S Dunsmuir, Shasta County (neotype locality).

Occurrence in California.—Published records: Shasta and Siskiyou counties. New records: None.

Reference.—Shelley 1997b.

Calianotus yosemitensis (Causey, 1954)

Type locality.—Vernal Falls, Yosemite National Park, Mariposa County.

Occurrence in California.—Published records: Calaveras, Madera, Mariposa, Tulare, and Tuolumne counties. New records: None.

Reference.—Shelley 1997b.

Genus Scytonotus C. L. Koch, 1847
Scytonotus simplex Chamberlin, 1941

Type locality.—Oregon.
OCCURRENCE IN CALIFORNIA.—Published records: Del Norte, Humboldt, Marin, Mendocino, San Joaquin, Sonoma, and Trinity counties. New records: None.

REFERENCE.—Shelley 1993b.

Family Xystodesmidae
Subfamily Xystodesminae
Tribe Chonaphini
Genus Selenocheir Shelley, 1994

Selenocheir arcuata Shelley, 1994
Type locality.—18.8 mi (30.1 km) NE Red Bluff, Tehama County.

OCCURRENCE IN CALIFORNIA.—Published records: Humboldt, Lake, Mendocino, and Tehama counties. New records: None.

REFERENCE.—Shelley 1994c.

Selenocheir directa Shelley, 1994
Type locality.—7 mi (11.2 km) NE Gazquet, Del Norte County.

OCCURRENCE IN CALIFORNIA.—Published record: Del Norte County. New records: None.

REFERENCE.—Shelley 1994c.

Selenocheir sinuata Shelley, 1994
Type locality.—2 mi (3.2 km) SW Dales, Tehama County.

OCCURRENCE IN CALIFORNIA.—Published records: Butte, El Dorado, Humboldt, Placer, Shasta, and Tehama counties. New records: None.

REFERENCE.—Shelley 1994c.

Tribe Sigmocheirini
Genus Ochthocelata Shelley, 1995

Ochthocelata adynata Shelley, 1995
Type locality.—4 mi (6.4 km) E Glenville, Kern County.

OCCURRENCE IN CALIFORNIA.—Published record: Kern County. New records: Kern Co., Live Oak Picnic Grounds (FSCA), and Kern R. Canyon, County Picnic Grounds, along Stork Creek (FSCA, NCSM).

REFERENCE.—Shelley 1995b.

Genus Sigmocheir Chamberlin, 1951

Sigmocheir calaveras Chamberlin, 1951
Type locality.—Crystal-Stanislaus Cave, ca 3 mi (4.8 km) W Columbia, Calaveras County.

OCCURRENCE IN CALIFORNIA.—Published records: Calaveras, Mariposa, and Tuolumne counties. New records: None.

REFERENCE.—Shelley 1995b.

Sigmocheir fuscata Shelley, 1995
Type locality.—Williams Cave, ca 1 mi (1.6 km) N Murphys, Calaveras County.

OCCURRENCE IN CALIFORNIA.—Published records: Amador, Calaveras, El Dorado, Placer, and Sacramento counties. New records: None.

REFERENCE.—Shelley 1995b.

Sigmocheir maculifer (Chamberlin, 1941)
Type locality.—9 mi (14.4 km) N Woodlake, Tulare County.

OCCURRENCE IN CALIFORNIA.—Published records: Fresno and Tulare counties. New records: None.

REFERENCE.—Shelley 1995b.

Anombradoneas sigmocheiridae Buckett and Gardner, 1969

Tribe Xystocheirini
Genus Anombrocheir Buckett and Gardner, 1969

Anombrocheir bifurcata Gardner and Buckett, 1969
Type locality.—8.5 mi (13.6 km) NW Rumsey, Colusa County.

OCCURRENCE IN CALIFORNIA.—Published records: Colusa and Yolo counties. New records: None.


Anombrocheir spinosa Buckett and Gardner, 1969
Type locality.—3.5 mi (5.6 km) N Leesville, Colusa County.

OCCURRENCE IN CALIFORNIA.—Published records: Colusa and Glenn counties. New records: None.


Genus Motyxia Chamberlin, 1941

Motyxia kerna Chamberlin, 1941
Type locality.—7 mi (11.2 km) N Glenville, Kern County.

OCCURRENCE IN CALIFORNIA.—Published records: Kern and Tulare counties. New records: None.

REFERENCE.—Shelley 1997c.
Motyxia monica Chamberlin, 1944

_TYPE LOCALITY._—Madelia Canyon, Sherman Oaks, Los Angeles County.

_OCCURRENCE IN CALIFORNIA._—Published records: Kern and Los Angeles counties. New records: None.

_REFERENCE._—Shelley 1997c.

Motyxia pior Chamberlin, 1941

_TYPE LOCALITY._—12 mi (19.2 km) NE Hammond, Tulare County.

_OCCURRENCE IN CALIFORNIA._—Published records: Tulare County. New records: None.

_REFERENCE._—Shelley 1997c.

Motyxia porrecta Causey and Tiemann, 1969

_TYPE LOCALITY._—Stork Creek picnic site, Kern River Canyon, Kern County.

_OCCURRENCE IN CALIFORNIA._—Published records: Kern County. New records: None.

_REFERENCE._—Shelley 1997c.

Motyxia sequoia alia Causey and Tiemann, 1969

_TYPE LOCALITY._—Along California highway 198 at Horseshoe Creek, Tulare County.

_OCCURRENCE IN CALIFORNIA._—Published records: Tulare County. New records: None.

_REFERENCE._—Shelley 1997c.

Motyxia sequoia sequoia (Chamberlin, 1941)

_TYPE LOCALITY._—10 mi (16 km) E Hammond, Tulare County.

_OCCURRENCE IN CALIFORNIA._—Published records: Tulare County. New records: None.

_REFERENCE._—Shelley 1997c.

Motyxia sequoiae intergrades

_OCCURRENCE IN CALIFORNIA._—Published records: Tulare County. New records: None.

_REFERENCE._—Shelley 1997c.

Motyxia sequoiae (Loomis and Davenport, 1951)

_TYPE LOCALITY._—Above Camp Nelson, Tulare County.

_OCCURRENCE IN CALIFORNIA._—Published records: Tulare County. New records: None.

_REFERENCE._—Shelley 1997c.

Motyxia tiemanni Causey, 1960

_TYPE LOCALITY._—Shirley Meadows, Kern County.

_OCCURRENCE IN CALIFORNIA._—Published records: Kern County. New records: None.

_REFERENCE._—Shelley 1997c.

Genus Parcipromus Shelley, 1995

Parcipromus cooki (Causey, 1955)

_TYPE LOCALITY._—Kings River Canyon, Fresno County (neotype locality).

_OCCURRENCE IN CALIFORNIA._—Published records: Fresno and Tulare counties. New records: None.

_REFERENCE._—Shelley 1995c.

Parcipromus gigantoarboricolus Shelley, 1995

_TYPE LOCALITY._—Giant Forest, Sequoia National Park, Tulare County.

_OCCURRENCE IN CALIFORNIA._—Published records: Tulare County. New records: None.

_REFERENCE._—Shelley 1995c.

Parcipromus tiemanni Shelley, 1995

_TYPE LOCALITY._—11.2 mi (17.9 km) S Camp Nelson, Tulare County.

_OCCURRENCE IN CALIFORNIA._—Published records: Tulare County. New records: None.

_REFERENCE._—Shelley 1995c.

Genus Wamokia Chamberlin, 1941

Wamokia dentata Buckett and Gardner, 1968

_TYPE LOCALITY._—3 mi (4.8 km) NW Somerset, El Dorado County.

_OCCURRENCE IN CALIFORNIA._—Published record: El Dorado County (known only from the type locality).

_REFERENCE._—Buckett and Gardner 1968b.
Wamokia discordis Buckett and Gardner, 1968

Type locality.—1 mi (1.6 km) E Auburn, Placer County.

Occurrence in California.—Published records: El Dorado and Placer counties. New records: None.
Reference.—Buckett and Gardner 1968b.

Wamokia falcata Buckett and Gardner, 1968

Type locality.—Camino, El Dorado County.

Occurrence in California.—Published record: El Dorado County (known only from the type locality).
Reference.—Buckett and Gardner 1968b.

Wamokia hoffmani Buckett and Gardner, 1968

Type locality.—1 mi (1.6 km) N Shingle Springs, El Dorado County.

Occurrence in California.—Published records: Amador and El Dorado counties. New records: None.
Reference.—Buckett and Gardner 1968b.

Wamokia placera Chamberlin, 1941

Type locality.—9 mi (14.4 km) N Placerville, El Dorado County.

Occurrence in California.—Published records: El Dorado County. New records: None.
Reference.—Buckett and Gardner 1968b.

Wamokia remota Buckett and Gardner, 1968

Type locality.—8 mi (12.8 km) NE Auburn, Placer County.

Occurrence in California.—Published records: Placer County. New records: None.
Reference.—Buckett and Gardner 1968b.

Wamokia sierrae Buckett and Gardner, 1968

Type locality.—1 mi (1.6 km) SW Grass Valley, Nevada County.

Occurrence in California.—Published record: Nevada County (known only from the type locality).
Reference.—Buckett and Gardner 1968b.

Genus Xystocheir Cook, 1904

Xystocheir bistipita Shelley, 1996

Type locality.—1 mi (1.6 km) N San Luis Obispo, San Luis Obispo County.

Occurrence in California.—Published record: San Luis Obispo County (known only from the type locality).
Reference.—Shelley 1996c.

Xystocheir brachymacris Shelley, 1996

Type locality.—1 mi (1.6 km) NE Pacific House, El Dorado County.

Occurrence in California.—Published records: El Dorado County. New records: None.
Reference.—Shelley 1996c.

Xystocheir dissecta dissecta (Wood, 1867)

Type locality.—Probably near San Francisco or San Jose, San Francisco or Santa Clara counties.

Reference.—Shelley 1996c.

Xystocheir dissecta microrama Shelley, 1996

Type locality.—2 mi (3.2 km) W Cordelia, Solano County.

Occurrence in California.—Published records: Alameda, Contra Costa, Sacramento, and Solano counties. New records: None.
Reference.—Shelley 1996c.

Xystocheir dissecta taibona Chamberlin, 1912

Type locality.—Pacific Grove, Monterey County.

Occurrence in California.—Published records: Monterey, San Benito, Santa Clara, and Santa Cruz counties. New records: None.
Reference.—Shelley 1996c.

Xystocheir dissecta intergrades

Occurrence in California.—Published records: Alameda, Contra Costa, Lake, Mendocino, Napa, Solano, Sonoma, Stanislaus, and Yolo counties. New records: None.
Reference.—Shelley 1996c.

Xystocheir modestior haerens Shelley, 1996

Type locality.—Along California highway 180, ca 28 mi (44.8 km) E Fresno, Fresno County.

Occurrence in California.—Published record: Fresno County. New records: None.
Reference.—Shelley 1996c.
Xystocheir modestior modestior (Chamberlin, 1941)

Type locality.—4–7 mi (6.4–11.2 km) N Badger, Fresno/Tulare counties.

Occurrence in California.—Published records: Fresno, Madera, and Tulare counties. New records: None.
Reference.—Shelley 1996c.

Xystocheir prolisorama Shelley, 1996

Type locality.—5 mi (8 km) N Cloverdale, Mendocino County.

Occurrence in California.—Published record: Mendocino County. New records: None.
Reference.—Shelley 1996c.

Xystocheir reducta (Causey, 1955)

Type locality.—2.1 mi (3.4 km) E Briceburg, Mariposa County.

Occurrence in California.—Published records: Amador, Calaveras, Mariposa, and Tuolumne counties. New records: None.
Reference.—Shelley 1996c.

Xystocheir solenofurcata Shelley, 1996

Type locality.—2 mi (3.2 km) N Plymouth, Amador County.

Occurrence in California.—Published record: Amador County. New records: None.
Reference.—Shelley 1996c.

Xystocheir stenomacris Shelley, 1996

Type locality.—15 mi (24 km) N Ahwahnee, Mariposa County.

Occurrence in California.—Published record: Mariposa County. New records: None.
Reference.—Shelley 1996c.

Xystocheir stolonifera stolonifera Shelley, 1996

Type locality.—2 mi (3.2 km) S Tollhouse, Fresno County.

Occurrence in California.—Published record: Fresno County. New records: None.
Reference.—Shelley 1996c.

Xystocheir stolonifera uncinata Shelley, 1996

Type locality.—3 mi (4.8 km) S Coarsegold, Madera County.

Occurrence in California.—Published records: Fresno and Madera counties. New records: None.
Reference.—Shelley 1996c.

Xystocheir stolonifera intergrades

Occurrence in California.—Published record: Madera County. New records: None.
Reference.—Shelley 1996c.

Tribe Xystodesmini
Genus Harpaphe Cook, 1904

Harpaphe haydeniana cummingsiensis (Verhoeff, 1944)

Type locality.—Cummings, Mendocino County.

Occurrence in California.—Published records: Humboldt, Mendocino, and Sonoma counties. New records: None.
Reference.—Buckett and Gardner 1968c.

Harpaphe haydeniana haydeniana (Wood, 1864)

Type locality.—Oregon (neotype locality).

Occurrence in California.—Published records: Marin County. New records: None.
Reference.—Buckett and Gardner 1968c.

Harpaphe haydeniana inlignea Chamberlin, 1949

Type locality.—Inwood, Shasta County.

Occurrence in California.—Published records: Shasta County. New records: None.
Reference.—Buckett and Gardner 1968c.

Harpaphe haydeniana lanceolata Bucket and Gardner, 1968

Type locality.—Mount St. Helena, Napa County.

Occurrence in California.—Published records: Lake and Napa counties. New records: None.
Reference.—Buckett and Gardner 1968c.

Harpaphe haydeniana maurogona Bucket and Gardner, 1968

Type locality.—2 mi (3.2 km) E Baxter, Nevada County.

Occurrence in California.—Published record: Nevada County (known only from the type locality).
Reference.—Buckett and Gardner 1968c.

Harpaphe haydeniana scotia (Chamberlin, 1941)

Type locality.—12 mi (19.2 km) S Los Gatos, Santa Clara County.
OCCURRENCE IN CALIFORNIA.—Published records: Monterey, Santa Clara, and Santa Cruz counties. New records: Alameda Co., Berkeley (UCB), San Mateo Co., County Memorial Park (CAS).

REFERENCE.—Buckett and Gardner 1968c.

Harpaphe pottera Chamberlin, 1949

TYPE LOCALITY.—Potter Creek, Mendocino County.

OCCURRENCE IN CALIFORNIA.—Published records: Humboldt and Mendocino counties. New records: None.

REFERENCE.—Buckett and Gardner 1968c.

Harpaphe telodonta Chamberlin, 1943

TYPE LOCALITY.—Arcata, Humboldt County.

OCCURRENCE IN CALIFORNIA.—Published records: Del Norte and Humboldt counties. New records: None.

REFERENCES.—Buckett and Gardner 1968c.


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LITERATURE CITED


REFERENCES.—Buckett and Gardner 1968c, 1968d.


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